Farm dairy effluent management plan guide

This document may be useful as a guide to develop an effluent management plan (EMP) specific to your dairy farm. To get value from the EMP, it should be tailored to your farm effluent system, farming operation and resources (staff/experience/responsibilities).

All new farm staff, no matter what their level of experience or seniority, should be inducted and trained in operating the farm effluent system and understand the contents of the EMP.

DairyNZ provides some guidance and resources around farm dairy effluent management, as do some accredited dairy effluent WoF assessors and system designers.

The EMP should clearly demonstrate each person's legal responsibilities, how effluent is to be managed, irrigation guidelines and application rates, monitoring, training and record keeping. It should include specific details on how pumps, valves, taps and switches operate on that particular system, and identify risk areas and setbacks.

Writing your effluent management plan

The level of detail required in an effluent management plan will differ from farm to farm depending on the effluent system infrastructure and how the farm is managed. An absentee owner may want to include more prescriptive detail as they will not be on farm regularly to monitor compliance.

Having a written EMP ensures everyone involved in operating the system understands how the system works and what their responsibilities are. It also and reduces the chance of mistakes or misunderstanding.

Recommended headings for your EMP are:

Introduction

Example: Farm animal effluent (effluent) includes faeces, urine, yard, and dairy shed wash down water, spilt milk and detergents, which are captured as part of the farms effluent management system. This includes effluent from the dairy shed and feed pad, sand traps and sumps, effluent solids bunkers, standoff or loafing pads and stock underpasses.

Effluent provides an important source of plant nutrients for the farm and must be managed carefully to avoid environmental contamination.

The farm effluent management plan sets out the legal and operational responsibilities for managing effluent at…(your farm name)…

Legal responsibilities

Example: Each person involved in the farming business, from the farm owner, sharemilker, contract milker or farm manager and their farm staff, has a legal responsibility to ensure effluent management is compliant 365 days of the year.

*Insert/summarise relevant Waikato Regional Plan rules, regulations, or resource consent conditions.

Understanding the (your farm name) effluent system

Describe the specific functions and operating procedures for the farms effluent system, including photographs and diagrams to illustrate various taps, valves, hydrants, sumps, irrigators etc. It is a good idea to break this down into components, for example, yard, feed pad, sand trap, sump, storage pond, timers and switches, irrigators and monitoring etc.

Effluent management

Describe how effluent is to be managed on a day-to-day basis and by whom, cleaning and maintenance of various parts of the system, monitoring pond levels and stormwater diversions, common faults and risks.

Effluent irrigation guidelines

Describe how the irrigator is to be set up, run, and monitored, how irrigation is recorded and where records are kept, irrigation application rates, use of fail safes if available etc. Correct drag hose layout is particularly important, as are setback distances from surface waterways.

Staff training and responsibilities

Describe how staff must operate the effluent system, records to be kept, understanding of rules/regulations, setbacks from drains/surface water, practical steps such as covering troughs, drag hose layout, when to irrigate and when NOT to irrigate, reporting faults and breakdowns etc.

Planning

Managing storage pond levels at various times of the season, maintenance and servicing schedule, correcting faults, responsibilities of external contractors / pond pumping services when irrigating effluent on-farm, contingencies to avoid unlawful discharges in adverse weather, if pumps or irrigators break down and during power cuts, records of verifying irrigator application rates (i.e. bucket tests), evidence of storage pond sealing etc.

Include an action plan if something goes wrong, including key contact details (e.g. contractors).

Effluent block map

Include a clear map of the effluent block illustrating setbacks to be observed, risk areas such as drains and surface water, slopes likely to result in runoff etc.

Documentation and record keeping

Include staff training records, irrigation records, service/ maintenance records, copies of rules/regulations/consent conditions, instruction and user manuals, copies of dairy effluent storage calculations, engineering design/reports.

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